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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,314	03/11/2002	Johannes Vaananen	2132-59PUS	3653

7590 06/14/2004

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EXAMINER

OSORIO, RICARDO

ART UNIT	PAPER NUMBER
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2673

13

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,314

Applicant(s)

VAANANEN JOHANNES

Examiner

RICARDO L OSORIO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because there is more than one paragraph.

Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Deeran et al (5,594,471).

Regarding claim 1, Deeran teaches of a method for presenting an alphanumeric keyboard (col. 5, lines 6-13) with an electronic device (Fig. 1, reference character 10), comprising at least a touch screen (Fig. 1, reference character 14) and a touch-sensitive cover (Fig. 1, reference

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character 18), the touch-sensitive cover surrounding the touch screen (see Fig. 1, reference characters 14 and 18. Character 18 surrounds character 14) comprising the steps of : dividing the alphanumeric keyboard into at least first and second parts (col. 1, lines 32-38, col. 4, lines 24-34 and col. 6, lines 1-7); electronically displaying the first part of the alphanumeric keyboard on the touch screen of the electronic device (Fig. 1, reference character 14, col. 4, lines 61-63, and col. 5, lines 10-12); and placing the second part of the alphanumeric keyboard on the touch-sensitive cover of the electronic device outside the touch screen, the alphanumeric keyboard being presented without significant borders between the first and second parts(col. 3, lines 36-39, and col. 4, line 64-col. 5, line 3, and col. 5, lines 7-10 and 12-13).

Regarding claim 6, Deeran teaches of an electronic device (Fig. 1, reference character 10) for presenting an alphanumeric keyboard (col. 5, lines 6-13), the electronic device comprising: a touch screen, or display touch zone, having a touch screen area (Fig. 1, reference character 14); a touch-sensitive cover surrounding the touch screen area (Fig. 1, reference character 18); software components operating the electronic device (col. 1, lines 40-42, col. 4, lines 27-31); means for dividing the alphanumeric keyboard into at least first and second parts (col. 1, lines 32-38, col. 4, lines 24-34 and col. 6, lines 1-7); means for electronically displaying the first part of the alphanumeric keyboard on the touch screen (Fig. 1, reference character 14, col. 4, lines 61-63, and col. 5, lines 10-12); wherein the second part of the alphanumeric keyboard is arranged on the touch-sensitive cover of the electronic device outside the touch screen area, wherein the alphanumeric keyboard is presented without significant borders between the first and second parts (col. 3, lines 36-39, and col. 4, line 64-col. 5, line 3, and col. 5, lines 7-10 and 12-13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran (see above rejection under 35 U.S.C. 102b) in view of Selig et al (6,492,978).

Regarding claim 2, Deeran teaches of touch zone (Fig. 1, reference character 14) displaying a keyboard application (col. 4, lines 61-62 and col. 5, lines 10-12). Also, Deeran teaches of a programmable user interface for defining portions of the display touch zone and to partition the touchscreen into areas having program-determined sizes and positions (col. 1, lines 35-38).

However, Deeran does not precisely teach of means for changing the keyboard set on the touch screen.

Selig teaches of means for changing the keyboard, or keypad, set on the touch screen (see Selig, col. 1, lines 54-64 and col. 2, lines 6-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the keyboard set, as taught by Selig, in the device of Deeran because it is well known in the art of touchscreens to program the computer to visually display any desired

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information and coordinate that information with the touchscreen, and to change a virtual keyboard and keypad dynamically as often as desired (col. 2, lines 6-11).

Regarding claim 3, Deeran is silent as to having an at least partially transparent touch-sensitive panel enabling said touch screen features.

Selig teaches of having an at least partially transparent touch-sensitive panel, or touchscreen, enabling the touch screen features (see col. 1, lines 35-36, 54-58 and 61-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an at least partially transparent touch-sensitive panel, or touchscreen, as taught by Selig, in the device of Deeran because it is widely known in the art of touch panels and touch screens that the touch panel overlaying the display screen needs to be at least partially transparent so that the images on the display can be transmitted through the touch panel (col. 1, lines 63-64) so that the images can be viewed by the user.

Next, also regarding claim 3, Deeran fails to teach of an at least partially transparent touch-sensitive panel enabling the touch-sensitive cover features.

Selig teaches of an at least partially transparent touch-sensitive panel (col. 1, lines 35-36 and 61-64, and col. 3, lines 40-42) that enables the touch-sensitive cover features (col. 6, lines 43-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the touch-sensitive cover features, as taught by Selig, in the device of Deeran for viewing, through the keyscreen, the virtual keypad displayed on the monitor behind the touch screen, or touch panel, while having the benefit of tactile feedback (see Selig, col. 4, lines 39-41, and col. 6, lines 46-48).

Regarding claim 7, Deeran teaches of touch zone (Fig. 1, reference character 14) displaying a keyboard application (col. 4, lines 61-62 and col. 5, lines 10-12). Also, Deeran teaches of a programmable user interface for defining portions of the display touch zone and to partition the touchscreen into areas having program-determined sizes and positions (col. 1, lines 35-38).

However, Deeran does not precisely teach of means for changing the keyboard set on the touch screen.

Selig teaches of means for changing the keyboard, or keypad, set on the touch screen (see Selig, col. 1, lines 54-64 and col. 2, lines 6-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the keyboard set, as taught by Selig, in the device of Deeran because it is well known in the art of touchscreens to program the computer to visually display any desired information and coordinate that information with the touchscreen, and to change a virtual keyboard and keypad dynamically as often as desired (col. 2, lines 6-11).

Regarding claim 8, Deeran is silent as to having an at least partially transparent touch-sensitive panel enabling said touch screen features.

Selig teaches of having an at least partially transparent touch-sensitive panel, or touchscreen, enabling the touch screen features (see col. 1, lines 35-36, 54-58 and 61-64).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an at least partially transparent touch-sensitive panel, or touchscreen, as taught by Selig, in the device of Deeran because it is widely known in the art of touch panels and touch screens that the touch panel overlaying the display screen needs to be at least partially transparent so that the images on the display can be transmitted through the touch panel (col. 1, lines 63-64) so that the images can be viewed by the user.

Next, also regarding claim 8, Deeran fails to teach of an at least partially transparent touch-sensitive panel enabling the touch-sensitive cover features.

Selig teaches of an at least partially transparent touch-sensitive panel (col. 1, lines 35-36 and 61-64, and col. 3, lines 40-42) that enables the touch-sensitive cover features (col. 6, lines 43-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the touch-sensitive cover features, as taught by Selig, in the device of Deeran for viewing, through the keyscreen, the virtual keypad displayed on the monitor behind the touch screen, or touch panel, while having the benefit of tactile feedback (see Selig, col. 4, lines 39-41, and col. 6, lines 46-48).

6. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran in view of Rosenberg et al (6,429,846).

Regarding claim 4, Deeran fails to teach of means for generating haptic feedback.

Rosenberg teaches of means for generating haptic feedback (col. 2, lines 54-58, and col. 16, lines 35-41).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have haptic feedback, as taught by Rosenberg, in the device of Deeran to assist and inform the user of interactions and events within a graphical user interface or other environment and ease cursor targeting tasks (see Rosenberg, col. 2, lines 56-59).

Regarding claim 9, Deeran fails to teach of means for generating haptic feedback.

Rosenberg teaches of means for generating haptic feedback (col. 2, lines 54-58, and col. 16, lines 35-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have haptic feedback, as taught by Rosenberg, in the device of Deeran to assist and inform the user of interactions and events within a graphical user interface or other environment and ease cursor targeting tasks (see Rosenberg, col. 2, lines 56-59).

7. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeran in view of Liebenow et al (US 2002/0118175).

Regarding claim 5, Deeran fails to teach of some of the other parts of the alphanumeric keyboard comprising mechanical keys.

Liebenow teaches of a touch-sensitive panel, or touch-screen, (Fig. 6, reference character 118) overlaying a display (Fig. 1, reference character 116). Mechanical keys 146-156 are located at the periphery, or border area, outside of the touch-screen area, and one or more of these keys correspond to the keys in a conventional QWERTY keyboard, for example, space bar, shift, etc (page 2, paragraph 26, lines 8-14, page 3, paragraph 33, lines 5-17 and paragraph 35, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mechanical keys, as taught by Liebenow, in the device of Deeran because mechanical keys are widely known in the art of keyboards to be used for entering data and cursor information into the computer, also, they can be alternately and interchangeably used with other key structures, such as keys comprising a touch sensitive surface (page 3, paragraph 35, lines 6-8), depending on the user's desire of a harder or softer feel. Finally, mechanical keys are more economic and they save space.

Regarding claim 10, Deeran fails to teach of some of the other parts of the alphanumeric keyboard comprising mechanical keys.

Liebenow teaches of a touch-sensitive panel, or touch-screen, (Fig. 6, reference character 118) overlaying a display (Fig. 1, reference character 116). Mechanical keys 146-156 are located at the periphery, or border area, outside of the touch-screen area, and one or more of these keys correspond to the keys in a conventional QWERTY keyboard, for example, space bar, shift, etc (page 2, paragraph 26, lines 8-14, page 3, paragraph 33, lines 5-17 and paragraph 35, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mechanical keys, as taught by Liebenow, in the device of Deeran because mechanical keys are widely known in the art of keyboards to be used for entering data and cursor information into the computer, also, they can be alternately and interchangeably used with other key structures, such as keys comprising a touch sensitive surface (page 3, paragraph 35, lines 6-8), depending on the user's desire of a harder or softer feel. Finally, mechanical keys are more economic and they save space.

Response to Arguments

1. Applicant's arguments filed March 24, 2004 have been fully considered but they are not persuasive.

Applicant argues that that Deeran fails to disclose a touch-sensitive cover surrounding the touch screen.

Examiner disagrees because Deeran teaches of touch zone (Fig. 1, reference character 14) which can be considered the touch screen and touch zone (Fig. 1, reference character 18) which can be considered the touch-sensitive border.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service
Office whose telephone number is (703) 306-0377.

Ricardo L. Osorio

Examiner

Art Unit: 2673

RLO

November 17, 2003



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600